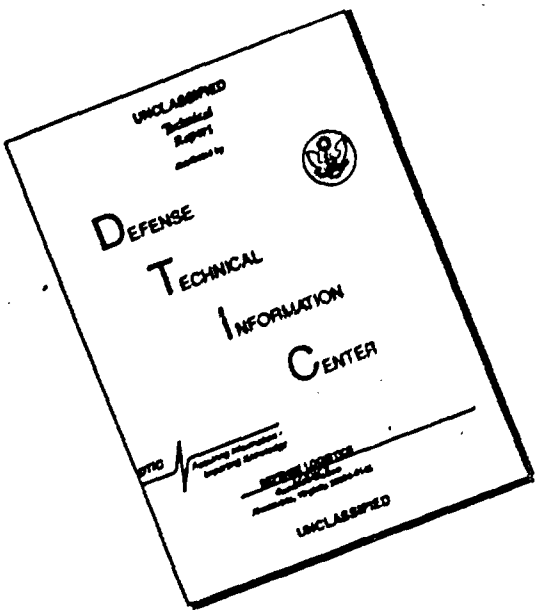
DISCLAIMER NOTICE



THIS DOCUMENT IS BEST QUALITY AVAILABLE. THE COPY FURNISHED TO DTIC CONTAINED A SIGNIFICANT NUMBER OF PAGES WHICH DO NOT REPRODUCE LEGIBLY.

63-4-5

BOEING

NUMBER D2-10889-1 Vol. 53

UNCLASSIFIED TITLE ACCEPTANCE SUMMARY REPORT
FLIGHT TEST MISSILE M436 MODEL SPEC. S-133-1007C

MODEL NO WS 133 A CONTRACT NO AF04(647)-289

ISSUE NO — ISSUED TO —

SEATTLE, WASHINGTON

THE BOEING COMPANY

2-5142

NUMBER D2-10889-1 Vol. 53

UNCLASSIFIED TITLE ACCEPTANCE SUMMARY REPORT

FLIGHT TEST MISSILE M436 MODEL SPEC. S-133-1007C

MODEL NO WS 133 A CONTRACT NO AF04(647)-289

ISSUE NO — ISSUED TO —

CLASSIFIED TITLE NONE
(STATE CLASSIFICATION)

CHARGE NUMBER

SPECIAL LIMITATIONS ON ASTIA DISTRIBUTION

ASTIA may distribute this report to requesting agencies subject to their security agreement approved Fields of Interest and the following

☐ UNLIMITED—To all agencies of the Department of Defense and their contractors

☐ LIMITED—To U S Military organizations only

This report may be distributed to nonmilitary agencies not approved above subject to Boeing approval of each request.

NOTE the LIMITED category may be checked only because of actual or potential patent proprietary ethical or similar implications

PREPARED BY [signature] 7-31-63

SUPERVISED BY [signature] 7/31/63

APPROVED BY [signature] 7/31/63

CLASS & DISTR APPROVED BY N/R

RELIABILITY APPROVAL N/R (DATE)

DOCUMENT TITLE PAGE U3 4287 9000 REV. 10/61

ACTIVE CHANGED PAGE

ACTIVE			CHANGED					ACTIVE			CHANGED				
SECTION	PAGE	DATE	SECTION	PAGE REVISED	PAGE ADDED	PAGE DELETED	DATE	SECTION	PAGE	DATE	SECTION	PAGE REVISED	PAGE ADDED	PAGE DELETED	DATE
0	A														
0	B														
0	C														
0	D														
I	1														
II	1-4														
III	1														
III	-A 1-10														
III	-B 1-14														
IV	-A 1-16														
IV	-B 1-9														
IV	-C 1-4														
V	1-3														
VII	-A 1-3														
VII	-B 1-3														
VIII	1														
X	0-5R														

REVISED

UD 4200 1000

CORRELATION INDEX

61-30 PARA.	TBC CORRELATION DATA PAGE	TERMINOLOGY
6.4 (A)	Section I	Introduction
6.4 (A K)	Section II	Certification Forms
6.4 (A)	Section II 2a	Approved Specification Changes Notices [illegible] S-133-1007C
6.4 (B)	Section II 4	Condition of Acceptance
6.4 (A)	Section III	Equipment Identification
6.4 (A)	Section III-A	Instrumentation Configuration [illegible]
6.4 (P)	Section III-B	Engineering Drawing Index
6.4 (H & M)	Section IV-A	M&IR Index
6.4 (A)	Section IV-B	Actual Configuration
6.4 (A)	Section IV-C	Committed Changes
6.4 (D&H)	Section V	Functional Test Complete
	Section VI	(Deleted)
6.4 (I)	Section VII-A	Contract Specification Non-Conformance [illegible] (Functional)
6.4 (C)	Section VII-B	Equipment Failures
6.4 (C&F)	Section VIII	Shortages
	Section IX	(Deleted)
6.4 (I)	Section X	Engineering Deviations and [illegible]

CONTENTS

REFERENCE: Operating Procedure 234-021 Dated 5 Feb. 1962.

INDEX

SECTION

INTRODUCTION

1. SCOPE

a. This data identifies and describes the actual status of End Items, designated for First Article Customer Inspection or Team Acceptance review (Reference: AFRSD Exhibits 61-51 & 61-30). It includes any Waivers or Deviations that exist or are required for Non-Conformance Items. Status reporting will be at the delivery level unless otherwise noted.

b. Responsibility of maintenance to include Base Commitments is transferred to the Base Quality Control Planning Unit receiving the equipment.

2. PURPOSE

a. To establish a composite status for use by Base personnel to determine status of equipment received.

b. To serve as a record of First Article End Item Acceptance as required by RSD-STL and AFQC at Seattle for delivery to Base Installations.

SECTION II

CERTIFICATION OF EQUIPMENT COMPLETION

The undersigned, being Chairman of the AFBSD, WS133A Acceptance Team, certifies the following:

1. The equipment described below is complete to the extent indicated on the transfer or Shipping Authorization Form and its addenda.

2. The equipment is suitable for shipment to the location described below, under the jurisdiction of the Boeing Company for future test and/or work as required to satisfy the contract specified below.

Equipment Model No. 21-50122-36 Equipment Serial No. M436

Equipment Nomenclature R&D SUB-SYSTEM ASSEMBLY

Destination BATC Contract Affected AF04(647)-289

T/S Authorization Voucher No. EU12160 EU12161 EU12162 EU12163

2d Lt Ronald J. Cook

AFBSD Acceptance Team Chairman

SECTION II

THE BOEING COMPANY AND SPACE TECHNOLOGY LABORATORIES

TECHNICAL CERTIFICATION

EQUIPMENT MODEL NO. 21-50122-36 S/N M436

NOMENCLATURE R & D SUB-SYSTEM ASSEMBLY

The undersigned has reviewed the Engineering Data on the subject equipment and certifies the following:

1. The equipment is technically adequate to perform its intended function.

2. The equipment meets all the specifications and requirements of Model Specification S-133-1007C Instrumentation Sub-System-Airborned R&D WS-133A, dated DEC. 9, 1961 1961, including the approved SCN's listed on page 2a, with the exception of the Waivers and Deviations pages 1 through 5A in D2-10089, Volume 53, Section X, Acceptance Summary Report.

7/31/63

ENGINEERING REPRESENTATIVE
FOR THE BOEING COMPANY

NOT REPRESENTED
REPRESENTATIVE FOR SPACE
TECHNOLOGY LABORATORIES

SECTION II

APPROVED SPECIFICATION CHANGE NOTICES TO S-133-1007C

APPROVED SCN's

3
5-12
14-19
28-31
34-35
37-40
42-44
46-47
49-51
52-54
58-59
63
66-67
69
70
71-80
85-87
90-91
93-95
110-118
120
128-131
139-146
163-165
168-170
189-193
215
216-225
229-231
233-235
238-239
241-244
249-250
254
260-264
270
275
277
278
282

AIR FORCE QUALITY CONTROL CERTIFICATION OF EQUIPMENT READY

FOR ACCEPTANCE TEST

EQUIPMENT PART NO.	SERIAL NO.	NOMENCLATURE
21-50122-36	M436	R&D SUB-SYSTEM ASSEMBLY

The undersigned has reviewed the equipment and its associated records:

1. VISUAL AND PHYSICAL INSPECTION OF EQUIPMENT

A.	Finish Satisfactory	Yes (X)	No ( )
B.	Workmanship Satisfactory	Yes (X)	No ( )
C.	Freedom from Damage	Yes (X)	No ( )
D.	Installation Complete Except as Noted on Contractor's Shortage and/or Incomplete List.	Yes (X)	No ( )
E.	Authorization for Shortage or Incompletes Noted in Item "D" has been received.	Yes (X)	No ( )

2. SPECIFICATION AND DRAWING STATUS

A.	All Applicable Specs have been complied with Except as Noted on Contractor's Request for Waiver or Deviation List.	Yes (X)	No ( )
B.	All Documents and Specs have been Approved by AF/BSD, or Waivers obtained.	Yes (X)	No ( )

3. BAC Acceptance Tags (BAC Form U3-4001-5000) have been properly Validated and Affixed to the Equipment. Yes (X) No ( )

4. All Test Equipment Utilized in Conducting Acceptance Tests were properly Calibrated. Yes (X) No ( )

SIGNATURE Joe S. Peha 7/31/63 SIGNATURE E. Marchesini 7/31/63

NAME (Print) JOE S. PEHA NAME (Print) E. Marchesini

Boeing Company
Quality Control Representative
Seattle, Washington

Air Force Quality Contol
Air Force Plant Representatives Office
Boeing Company
Seattle, Washington

REVISED _____

US 4200 2000 (MAR 62) 419101

Conditions of Acceptance

Comments

SECTION III

EQUIPMENT IDENTIFICATION FORM

DATE 7-31-63

~~GTM or~~ FTM SERIAL NO. M436

MODEL or EQUIPMENT SPECIFICATION S-133-1007C

TOP DRAWING 21-50120

PART NUMBER 21-50120-36

NOMENCLATURE R&D SUB-SYSTEM ASSEMBLY

INSTRUMENTATION CONFIGURATION LOG

MISSILE 436

SECTION NO. 43

NO.	MEAS. CODE	NOMENCLATURE	NAME OF MFG.	EQUIPMENT SERIAL NO. (BAC/MFG)	PART NUMBER	WIRE EQUIP ITEM NO.	INSTL. DATE	M&IR USED ON.
1		Power Splitter & Filter	Sigma	010734/61	LPF-12B	A91	11-28-2	25-17869-38
2		Event Marker	Electro	020456/335	10-20401-1	R4(A60)	10-31-2	25-33594-37
3		Event Marker	Electro	021144/503	10-20401-1	R2(A60)	10-31-2	25-33594-37
4		Event Marker	Electro	021145/504	10-20401-1	R1(A60)	10-31-2	25-33594-37
5		Event Marker	Electro	021167/505	10-20401-1	R3(A60)	10-31-2	25-33594-37
6		RF Unit	U. Electro Dyn.	021210/553	10-20402-40	A83	11-28-2	25-17866-37
7		Multiplexer Prog. Box	Radiation	0046RT	10-20402-41	A22	10-28-2	21-50035-4
8		Multiplexer Box	Radiation	0067RP/0009	10-20402-42	A26	11-2-2	21-50035-14
9		R.F. Package	United Electro Dynamics	040800/619	10-20403-7	A80	12-6-2	25-17867-37
10		V.C.O. Package	United Electro Dynamics	040865/600	10-20403-8	A80	12-18-2	25-17867-37
11		Triplexer	Allen Bradley	020804/1059	10-20409	A82	11-21-2	25-15718-959
12		Voltage Regulator	Electro Dev.	021446/74	10-20410	VR1	11-21-2	25-15718-959

INSTRUMENTATION CONFIGURATION LOG

MISSILE 436

SECTION NO. 43

NO.	MEAS. CODE	NOMENCLATURE	NAME OF MFG.	EQUIPMENT SERIAL NO. (BAC/MFG)	PART NUMBER	WIRE EQUIP ITEM NO.	INSTL. DATE	M&IR USED ON.
13		Switch	Kinetics	020451/0000146	10-20420-7	S5	11-9-2	25-33595-59
14		Transfer Switch	Kinetics	021790/0134	10-20420-8	S2	11-14-2	25-33595-59
15		Switch	Kinetics	800919/0143	10-20420-9	S6	11-9-2	25-33595-59
16		Receiving Set	Motorola	021398/122	10-20428-2	A9	11-28-2	25-17869-38
17		Receiving Set	Motorola	021397/121	10-20428-2	A5	11-28-2	25-17869-38
18		Linear Accelerometer	Statham	020380/11857	10-20454-5	MT84	10-5-2	25-21584-7
19		Linear Accelerometer	Statham	020381/11861	10-20454-5	MT83	10-1-2	25-21584-8
20		Linear Accelerometer	Statham	04068/11271	10-20454-6	MT82	10-5-2	25-21584-4
21		D.C. Amplifier	Electro Dev.	016320/159	10-20459-2	A29	12-6-2	25-17867-37
22		Staging Switch	Electro Dev.	020778/186	10-20476	S1	11-14-2	25-33596-26
23		Thermocouple Ref. Junction	Servo	021429/129	10-20478-11	HR6	11-7-2	25-22282-16
24		Transformer	United Electro Dyn.	582	10-20833-26	A146	10-16-2	25-17062-35

INSTRUMENTATION CONFIGURATION LOG

MISSILE 436

SECTION NO. 43

NO.	MEAS. CODE	NOMENCLATURE	NAME OF MFG.	EQUIPMENT SERIAL NO. (BAC/MTG)	PART NUMBER	WIRE EQUIP ITEM NO.	INSTL. DATE	M&IR USED ON.
25		Transformer	United Electro Dynamics	594	10-20833-26	A147	10-16-2	25-17062-35
26		Multiplexer Prog.	Boeing	0002	21-50035-4	A22	11-28-2	25-17866-37
27		Multiplexer	Boeing	0008/442	21-50035-37	A26	4-24-3	25-17866-37
28		Command Destruct Antenna	Boeing	M414 R2-1	25-15837-5	E 6	11-27-2	25-15718-959
29		Command Destruct Antenna	Boeing	M441-2	25-15837-5	E 7	11-27-2	25-15718-959
30		Command Destruct Antenna	Boeing	M443-2	25-15837-5	E 8	11-27-2	25-15718-959
31		Telemetry Antenna	Boeing	M431-1	25-15850-9	E 1	12-5-2	25-15718-959
32		Telemetry Antenna	Boeing	M429-3	25-15850-9	E 2	12-5-2	25-15718-959
33		Telemetry Antenna	Boeing	M430-1	25-15850-9	E 3	7-29-3	25-15718-959
34		Mistram Antenna	Boeing	432-1	25-25518-14	E 9	3-29-3	25-15718-959
35		Mistram Antenna	Boeing	M431-2	25-25518-14	E 10	3-29-3	25-15718-959
36		VSWR Monitor	Boeing	M446	25-25843-13	A 153	5-21-3	25-15718-959

INSTRUMENTATION CONFIGURATION LOG

MISSILE 436

SECTION NO. 43

NO.	MEAS. CODE	NOMENCLATURE	NAME OF MFG.	EQUIPMENT SERIAL NO. (BAC/MFG)	PART NUMBER	WIRE EQUIP ITEM NO.	INSTL. DATE	MR/IR USED ON.
37		Waveguide Assy.	Technicraft	8215Z	25-27648-1	W2	1-4-3	25-15718-959
38		Waveguide Assy.	Technicraft	800975/1793T	25-27648-15	W3	5-21-3	25-15718-959
39		Waveguide Assy.	Technicraft	800420/5882Y	25-27648-13	W1	5-21-3	25-25493-7
40		Waveguide Assy.	Technicraft	800856/3964Z	25-27648-14	W3	5-21-3	25-25493-7
41		Mistram Transponder	Boeing	1744 / R2	25-28056-2	See line 42 & 43	7-22-63	25-25493-7
42		Transponder	GFE	21	7641450G1MODA	A151	7-22-63	25-28056-2
43		Filter	GFE	30	7641481G1	A152	7-22-63	25-28056-2
44		Filter	Genistron	502	25-28059-1	A181	12-5-2	25-15718-959
45		Matching Unit	Boeing	M436	25-34555-7	A51	11-13-2	25-33594-37
46		Power Splitter	Boeing	M436	29-13515	A85	10-2-2	25-15187-9009
47		Capacitor Assy.	Boeing	M436	29-21662-1	A187	11-15-2	25-33596-26

INSTRUMENTATION CONFIGURATION LOG

MISSILE 436

SECTION NO. 45

NO.	MEAS. CODE	NOMENCLATURE	NAME OF MFG.	EQUIPMENT SERIAL NO. (BAC/MFG)	PART NUMBER	WIRE EQUIP ITEM NO.	INSTL. DATE	MR-IR USED ON.
1	A005S	Bridge Strain Gage	Baldwin	Z01235	BAC S-44A-1	MT 176	7-19-2	25-28538-912
2	A505S	Bridge Strain Gage	Baldwin	Z01236	BAC S-44A-1	MT 180	7-19-2	25-28538-912
3	A006S	Bridge Strain Gage	Baldwin	Z01237	BAC S-44A-1	MT 177	7-19-2	25-28538-912
4	A506S	Bridge Strain Gage	Baldwin	Z01238	BAC S-44A-1	MT 181	7-19-2	25-28538-912
5	A007S	Bridge Strain Gage	Baldwin	Z01239	BAC S-44A-1	MT 178	7-19-2	25-28538-912
6	A507S	Bridge Strain Gage	Baldwin	Z01240	BAC S-44A-1	MT 182	7-19-2	25-28538-912
7	A008S	Bridge Strain Gage	Baldwin	Z01241	BAC S-44A-1	MT 179	7-19-2	25-28538-912
8	A508S	Bridge Strain Gage	Baldwin	Z01242	BAC 44A-1	MT 183	7-19-2	25-28538-912
9	A097H	Calorimeter	HyCal	040881 6875	C-1104-B-30-002-070	MT 486	12-19-2	25-28586-12
10	——	Control Box	Radiation	0215RR	10-20402-47	A121	10-28-2	21-50035-5
11		Auxiliary Box	Radiation	0329RW	10-20402-48	A7	10-28-2	21-50035-15
12		Auxiliary Box	Radiation	0330RW	10-20402-48	A119	10-23-2	21-50035-16

INSTRUMENTATION CONFIGURATION LOG

MISSILE 436

SECTION NO. 45

NO.	MEAS. CODE	NOMENCLATURE	NAME OF MFG.	EQUIPMENT SERIAL NO. (BAC/MFG)	PART NUMBER	WIRE EQUIP ITEM NO.	INSTL. DATE	MR/IR USED ON.
13	A144T	Thermocouple	Aero Res.	020628/781	10-20477-9120	MT640	10-26-2	25-28538-912
14	A263T	Thermocouple	Aero Res.	020627/780	10-20477-9120	MT 13	10-26-2	25-28538-912
15	A259T	Thermocouple	Aero Res.	020632/785	10-20477-9120	MT 12	10-26-2	25-28538-912
16	———	Thermocouple Ref. Jct.	Servo Mech.	021789/138	10-20478-11	HR 5	11-20-2	25-31976-26
17		Control Box	Boeing	0002 (M436)	21-50035-5	A121	11-13-2	21-50122-9017
18		Aux. Box	Boeing	0002 (M436)	21-50035-15	A7	11-13-2	21-50122-9017
19		Aux. Box	Boeing	0002 (M436)	21-50035-16	A119	11-13-2	21-50122-9017
20		Bridge Comp. Network	Boeing	M430 11 of 19	25-25223-902(-5)	A92	1-2-3	21-50122-9017
21		Bridge Comp. Network	Boeing	M430 6 of 19	25-25223-902(-5)	A93	1-2-3	21-50122-9017
22		Bridge Comp. Network	Boeing	M431-13	25-25223-902(-5)	A98	1-2-3	21-50122-9017
23		Bridge Comp. Network	Boeing	431-5	25-25223-903(-6)	A94	1-2-3	21-50122-9017
24		Bridge Comp. Network	Boeing	M432-2	25-25223-903(-6)	A95	1-2-3	21-50122-9017

INSTRUMENTATION CONFIGURATION LOG

MISSILE 436

SECTION NO. 45

NO.	MEAS. CODE	NOMENCLATURE	NAME OF MFG.	EQUIPMENT SERIAL NO. (SAC/AFG)	PART NUMBER	WIRE EQUIP ITEM NO.	INSTL. DATE	M&IR USED ON.
25		Bridge Comp. Network	Boeing	M433-3	25-25223-903(-6)	A97	1-2-3	21-50122-9017
26		Bridge Comp. Network	Boeing	M433-2	25-25223-903(-6)	A96	1-2-3	21-50122-9017
27		Bridge Comp. Network	Boeing	M433-4	25-25223-903(-6)	A99	1-2-3	21-50122-9017
28		Matching Unit	Boeing	M436	25-34553-6	A42	1-2-3	21-50122-9017
29		Ablation Gage	Boeing	M444-2	25-35899-7	MT 369	4-3-3	25-28538-913

INSTRUMENTATION CONFIGURATION LOG

MISSILE 436
SECTION NO. 47

NO.	MEAS. CODE	NOMENCLATURE	NAME OF MFG.	EQUIPMENT SERIAL NO. (BAC/MFG)	PART NUMBER	WIRE EQUIP ITEM NO.	INSTL. DATE	M&IR USED ON.
1	A098H	Calorimeter	Hy-Cal	040892/6889	C-1104-B-30-002-070 MT757		12-26-2	25-28586-12
2		Control Box	Radiation	0102RR	10-20402-47	A118	10-28-2	21-50035-6
3		Auxiliary Box	Radiation	0333RW	10-20402-48	A4	10-23-2	21-50035-17
4		Auxiliary Box	Radiation	0139RN	10-20402-48	A116	10-23-2	21-50035-18
5		D.C. Amplifier	Electro Dev. Corp.	019629/78	10-20459-2	A217	11-15-2	21-50122-9018
6		Thermocouple	Aero Res.	020634/787	10-20477-9120	A159T	10-15-2	25-28539-914
7		Thermocouple	Aero Res.	020643/796	10-20477-9120	A331T	10-15-2	25-28539-914
8		Thermocouple Ref. Unit	Servo-Mech.	022106/143	10-20478-11	HR 2	2-7-63	25-31976-25
9		Control Box	Boeing	0002(436)	21-50035-6	A118	11-28-2	21-50122-9018
10		Auxiliary Box	Boeing	0002(436)	21-50035-17	A4	11-28-2	21-50122-9018
11		Auxiliary Box	Boeing	0002(436)	21-50035-18	A116	11-28-2	21-50122-9018
12		Matching Unit	Boeing	0435	25-34554-8	A88	2-11-3	21-50122-9018

INSTRUMENTATION CONFIGURATION LOG

MISSILE 436

SECTION NO. 47

NO.	MEAS. CODE	NOMENCLATURE	NAME OF MFG.	EQUIPMENT SERIAL NO. (BAC/MFG)	PART NUMBER	WIRE EQUIP ITEM NO.	INSTL. DATE	M&IR USED ON.
13		Ablation Gage	Boeing	M444-1	25-35899-7	MT371	4-2-3	21-50122-9018

INSTRUMENTATION CONFIGURATION LOG

MISSILE M436

SECTION NO. 49

NO.	MEAS. CODE	NOMENCLATURE	NAME OF MFG.	EQUIPMENT SERIAL NO. (EACH MFG)	PART NUMBER	WIRE EQUIP ITEM NO.	INSTL. DATE	MR&IR USED ON.
1		Calorimeter	HY-CAL	012272/1236	C-1080-002	MT 152	12-21-2	25-23196-7
2	A281T	Thermocouple	Aero Research	020818/806	10-20477-9120	MT 146	10-31-2	25-35582-901
3	A284T	Thermocouple	Aero Research	020822/810	10-20477-9120	MT 149	10-31-2	25-35582-901

SECTION III-B

ENGINEERING DRAWING INDEX

MISSILE SECTION 43 (M436)

Indenture 1 2 3 4 5 6

PART NUMBER	NOMENCLATURE
21-50122-36	R&D Sub System Assy. AMR-FTM
25-15718-46	R&D Section Assy.
25-20600-46	Compartment Assy.
25-16196-6	Ant. Instl.-Tele. Sec. 43
25-15850-9	Ant. Tele.-Assy. of
25-16197-4	Ant. Instl.-C.D. Sec. 43
25-15837-5	Ant. C.D. Assy. of
29-13522	Support Bracket Assy.
29-13542	Antenna-Command Destruct Assy. of
25-19562-6	Marking Instl.
25-27080-3	Duct. Instl.
25-27048-2	Channel-Assy. of
25-27060-1	Duct-FM Tray Cooling-Assy. of
26-11826-1	Clamp-Assy. of
26-11830-1	Hat Sec.-Assy. of
26-11835-1	Clamp-Assy. of
26-11836-1	Clamp-Assy. of
26-11852-1	Filler-Assy. of
26-11853-1	Filler-Assy. of
29-20499-4	Clamp-Assy. of
29-20500-4	Clamp-Assy. of
25-26852-64	Duct-Assy. of
25-26852-62	Filler-Assy. of
25-26852-63	Filler-Assy. of
25-15187-223	Instr. Sec. Assy.
25-16465-20	Struct. Instl. Peripheral Equip. Supt.
26-10260-3	Base Plate Assy. of
29-21032-5	Tray-Assy. of
29-19463-3	Tray-Assy. of
26-8362-2	Support Brkt. P.C.M. Tray Assy. of
29-19464-6	Tray-Assy. of
29-19462-4	Wire Tray-Assy. of
29-20839-1	Tray-Assy. of
29-23515	Power Splitter
22-19464-1	Aft Wire Tray Assy. of
25-23297-11	Channel-Equip-Support Assy. of
29-18417-5	Bracket-Assy. of
26-10794-1	Angle-Assy. of
26-10795-1	Support Angle-Assy. of
26-10794-4	Angle-Assy. of
29-18417-8	Bracket-Assy. of
26-9358	Tray Assy. of
26-9450	Bracket-Wire Tray Support Fwd. Assy. of
26-9463	Tray Support PCM Tray Assy. of

ENGINEERING DRAWING INDEX

MISSILE SECTION 43 (M436)

Indenture (1 2 3 4 5 6)	PART NUMBER	NOMENCLATURE
5	29-16439-1	Bracket-Wire Bundle Support Assy. of
5	29-15355	Support Fitting PCM Tray Assy. of
5	29-15617	Fitting Accelerometer Support L.H. Assy. of
5	29-15619	Fitting Accelerometer Support R.H. Assy. of
5	26-8365-4	Fitting Assy. of
5	29-16577-1	Tube-Assy. of
5	29-15595-[illegible]	Bracket Assy. of
5	29-14031-7	Fitting-Assy. of
5	29-14031-16	Fitting-Assy. of
5	29-14031-20	Fitting-Assy. of
5	29-14031-25	Fitting-Assy. of
5	29-14031-17	Fitting-Assy. of
5	29-13452-11	Fitting-Attach, C.D. Tray-Assy. of
5	29-13452-12	Fitting-Attach, C.D. Tray-Assy. of
5	29-13450-7	Fitting-Attach Telemetry Tray, Assy. of
5	29-13450-8	Fitting-Attach Telemetry Tray, Assy. of
5	29-20486-1	Bracket Assy.
5	29-20569-1	Bracket Assy.
5	26-11859-1	Support Assy.
5	26-11863-1	Support Assy.
4	25-20538-7	Insulation Inst.
4	25-20537-18	Plug Instl.
5	26-12135-1	Plate Bearing Assy. of
4	25-28834-35	Wire & Equipment Instl.
5	25-21800-55	Coaxial Cable Bundle Tele. Assy. of.
5	25-21800-56	Coaxial Cable Bundle Tele. Assy. of
5	25-21800-57	Coaxial Cable Bundle Tele. Assy. of
5	25-21800-25	Coaxial Cable Bundle Tele. Assy. of
5	25-21800-44	Coaxial Cable Bundle Tele. Assy. of
5	25-21800-46	Coaxial Cable Bundle Tele. Assy. of
5	25-21800-47	Coaxial Cable Bundle Tele. Assy. of
5	25-21800-48	Coaxial Cable Bundle Tele. Assy. of
5	25-21800-49	Coaxial Cable Bundle Tele. Assy. of
5	25-21800-53	Coaxial Cable Bundle Tele. Assy. of
5	25-21800-24	Coaxial Cable Bundle Tele. Assy. of
5	25-21584-4	Accel. Bundle-Assy. of
6	10-20454-6	Linear-Accelerometer (-3 Opt.)
5	25-21584-7	Accel. Bundle-Assy. of
6	10-20454-5	Linear-Accelerometer
5	25-21584-8	Accel. Bundle-Assy. of
6	10-20454-5	Linear-Accelerometer

SECTION III-B

ENGINEERING DRAWING INDEX

MISSILE SECTION 43 (M436)

1 2 3 4 5 6

PART NUMBER	NOMENCLATURE
25-28059-1	Filter - Assembly of
25-22282-16	Cable - Assembly of
10-20478-11	Ref. Junction Assembly
25-33595-88	Wire Bundle Comp. Assembly of
10-20420-7	Switch - Assembly of
10-20420-9	Switch - Assembly of
10-20483-4	Protective Cover Connector
10-20483-1	Connector - Umbilical
10-20410	Voltage Regulator
10-20409	Triplexer
25-33185-85	Electric Bundle
29-24153-11	Shield - Cover Wire Bundle Assembly of
29-24153-1	Shield Base Wire Bundle Assembly of
29-21390-1	Tray - Assembly of
29-21390-2	Cover - Assembly of
29-23567-1	Hat Section - Assembly of
25-25496-7	Waveguide and Antenna Installation
25-25843-13	WAVEGUIDE DUMMY MONITOR, ASSY OF
29-20757-1	Clamp Support Antenna Assembly of
25-25518-14	Antenna
25-27648-1	Waveguide Assembly of
25-27648-13	Waveguide Assembly of
25-27648-14	Waveguide Assembly of
26-11971-1	Clamp Assembly
29-20784-1	Clamp Assembly
29-20784-2	Clamp Assembly
29-20784-3	Clamp Assembly
25-27648-15	Waveguide Assembly of
25-16400-14	Tray Installation - PM/PM
25-17867-37	Tray Assembly - PM
25-33596-42	Wire Bundle Assembly
29-21662-1	Capacitor - Assembly of
10-20476	Switch Staging
10-20420-8	Switch Transfer and Test
25-16406-52	Tray Structure - Assembly Calibrate
29-15166-4	Fitting - Assembly of
29-15183-4	Fitting - Assembly of
29-16466-1	Clamp - Assembly of
10-20403-8	VCO Package
10-20403-7	R. F. Package
10-20459-2	Amplifier D. C. Signal A29
29-15475-16	Base - Assembly of
29-15475-18	Cover - Assembly of
25-16402-7	Tray Assembly Command Destruct
25-17869-38	Tray Assembly C. D.
25-16408-27	C. D. Tray - Assembly of

SECTION III-B

ENGINEERING DRAWING INDEX

MISSILE SECTION 43 (M436)

1 2 3 4 5 6

PART NUMBER	NOMENCLATURE
29-15293-2	Fitting - Assembly of
29-15290-1	Fitting - Assembly of
29-15925	Splice Box - Assembly of
25-17062-25	Bundle Assembly
25-17062-26	Bundle Assembly
25-17062-35	Bundle Assembly
10-20833-26	C. D. Insulation Transformer
10-20428-2	Receiving Set C. Range Safety
LPF-12B	Low Pass Filter
29-15925-1	Cover Assembly
29-15494-7	Cable Support - Assembly of
29-15494-8	Cable Support - Assembly of
29-16792-1	Box - Assembly of
26-9969-1	Cover - Assembly of
25-29817-1	Duct Installation MISTRAM Tray Section 43
29-22596-1	Duct - FM Cooling MISTRAM Tray Assembly of
26-11790-1	Retained Screw Assembly
25-12935-1	Flexible Tube Assembly
29-22556-1	Angle - Support Cooling Air Duct, FM Assembly of
29-22556-2	Angle - Support Cooling Air Duct. FM Assembly of
25-16401-12	Tray Installation - Trackinb Beacon
25-25493-7	Tray Assembly Mistram
25-25494-1	Tray Structure Assembly
26-11912-2	Rack - Stowage MISTRAM Waveguide Assembly of
29-20330-1	Fitting R. H. Tray Attach., Assembly of
29-20331-1	Fitting L. H. Tray Attach., Assembly of
29-20381-1	Guide - MISTRAM Tray Assembly of
29-20756-2	Wire Support - Tray MISTRAM, Assembly of
25-25495-1	Elect. Cable Bundle MISTRAM Tray Assembly of
25-25495-2	Elect. Cable Bundle Mistram Tray Assembly of
29-20756-1	Wire Support Tray Assembly
25-28056-2	Receiver - Transmitter Transponder & Filter
25-16199-16	Tray Installation PCM/FM
25-17866-37	Tray Assembly PCM
25-16143-122	PCM Tray Structure
29-14046-2	Fitting - Assembly of
29-14047-2	Fitting - Assembly of
25-27040-1	Duct - Assembly of
25-26852-10	Duct - Assembly of (Opt. to 25-27040-1)
29-20417-1	Duct - Assembly of
25-26852-7	Duct - Assembly of (Opt. to 29-20417-1)
10-20402-40	RF Unit (A83)

SECTION III-B

ENGINEERING DRAWING INDEX

Indenture

MISSILE SECTION 43 (M436)

1 2 3 4 5 6 PART NUMBER	NOMENCLATURE
29-15585	Base Assy. of
29-15586	Support Base Assy. of
29-15616	Support Clamp-Assy. of
29-16095	Cover-Support Assy. of
29-16097	Liner Instl. PCM Tray
29-15585-10	Cover Assy. of
29-15584-16	Cover Assy. of
29-15585-16	Cover Assy. of
25-33594-59	Elect. Cable Bundle PCM Assy. of
25-34555-7	Matching Unit Modular Assy. of
29-14185-4	Box Assy. of
29-26811-1	Clamp Support Assy. of
29-26838-1	Clamp Assy. of
29-26846-1	Terminal Board Assy. of
25-34002-1	Module-Assy. of
25-34054-1	Module-20V Pwr. Mon. Assy. of
25-34055-1	Module-Dest. V. Divider Assy. of
25-34556-1	Module-Calorimeter Cal. Assy. of
25-34019-1	Module-Battery Divider Assy. of
29-25258-1	Module Trigger Network Assy. of
25-16462-8	Event Marker-Instr. Assy. of
10-20401-1	Event Marker
29-15345-13	Support Assy. of (Opt. to -6)
29-15345-6	Support Assy. of
25-33185-91	Elect. Bundle Patch Plug Assy. of (P160)
25-33185-82	Elect. Bundle Patch Plug Assy. of (P161)
25-33185-92	Elect. Bundle Patch Plug Assy. of (P162)
25-33185-111	Elect. Bundle Patch Plug Assy. of (P163)
25-33185-109	Elect. Bundle Patch Plug Assy. of (P164)
25-33185-96	Elect. Bundle Patch Plug Assy. of (P159)
21-50035-1	PCM/FM Telemetry Components (Opt.)
21-50037-1	PCM/FM Telemetry Components (Opt.)
21-50038-1	PCM/FM Telemetry Components (Opt.)
21-50039-1	PCM/FM Telemetry Components (Opt.)
21-50040-1	PCM/FM Telemetry Components (Opt.)
21-50041-1	PCM/FM Telemetry Components (Opt.)
21-50042-1	PCM/FM Telemetry Components (Opt.)
21-50036-1	PCM/FM Telemetry Components
21-50036-4	Multiplexer-Programmer Assy. of
10-20402-41	Multiplexer-Programmer Box
10-20402-53	DC to DC Converter, Sync.
10-20402-73	12V Voltage Regulator #1
21-50036-37	Multiplexer, Assy. of
21-50036-7	Multiplexer, Sub-Assy.
10-20402-42	Multiplexer Box
10-20402-79	50MV Amplifier & Clamp Assy.

SECTION III-B

ENGINEERING DRAWING INDEX

MISSILE SECTION 43 (M436)

Indenture
1 2 3 4 5 6

PART NUMBER		NOMENCLATURE
	10-20402-80	5V Amplifier & Clamp Assy.
	10-20402-81	10MV Amplifier & Clamp
25-15799-24		Opt. & Interchangeable With 25-15799-25
25-15799-25		Command Destruct Battery
29-15639		Wire Bundle Assy. of
25-15773-23		Case-Batt., Assy. of
29-17982-2		Captive Fastiner-Assy. of
25-19501-9		Electrolyte Kit
25-25173-7		Opt. & Interchangeable with 25-25173-8
25-25173-8		Battery Tray-Instr. Sec., Assy. of
25-25172-4		Cover Assy. of
25-25236-1		Electric Cable Bundle Assy. of
25-25236-2		Jumper Assy. of
25-25236-3		Jumper Assy. of
25-25174-13		Case-Batt. Tray Assy. of
29-13708-1		Brkt. FT. Support Battery Tray Assy. of
29-13717		Fitting Assy. of
26-8372		Retainer Assy. of
29-19218-1		Support Flange Battery Tray Assy. of
29-19285-4		Resistor Package Assy. of
10-20439-7		Cartridge Assy.
10-20439-8		Cooling Valve

SECTION III-B

ENGINEERING DRAWING INDEX

MISSILE SECTION 45 (M436)

Indenture 1 2 3 4 5 6 PART NUMBER	NOMENCLATURE
21-50122-36	R&D Sub-System AMR-FTM
25-23207-34	Interstage Assy. Insulated
25-29156-2	Marking Installation
25-26626-4	Bracket Installation G&C Support
25-25864-17	Bracket Assy. of
25-20599-42	Wire Tray Instl. Interstage 2&3
25-20599-27	Wire Tray Assy. of
25-23208-139	Interstage Assy., Interstage 2-3
25-23117-4	Splice Assy. of
25-24153-58	Adapter Ring Assy. of
25-25619-8	Shield Assy.
25-24153-59	Adapter Ring Assy. of
25-25619-2	Shield Assy.
25-24154-25	Separation Ring Assy.
25-24154-26	Separation Ring Assy. of
25-24154-27	Separation Ring Assy.
25-24155-1	Fitting Assy. of, Detonator
25-25441-2	Splice Fitting, Assy. of
25-25441-7	Splice Fitting, Assy. of
25-25467-17	Door Assy. of, Ordnance Access
25-25467-18	Door Assy. of, Ordnance Access
25-25467-25	Door Assy. of, Ordnance Access
25-25511-27	Fitting Assy. of, Opt. to -19
25-25511-28	Fitting Assy. of, Opt. to -20
25-25511-19	Fitting Assy. of
25-25511-20	Fitting Assy. of
25-25511-21	Fitting Assy. of
25-25511-22	Fitting Assy. of
25-25511-25	Fitting Assy. of
25-26621-6	Ordnance Fitting Assy.
26-11748-3	Door-Ordnance Fitting
26-11749-1	Door-Ordnance Fitting
29-13483	Adaptor Ring Aft.
29-19633-5	Bracket Assy. of, Lanyard
29-20128-3	Doubler-Door Ordnance Access Assy.
29-20165-1	Door-Access Skirt Removal Booster Assy.
29-20845-1	Ordnance Fitting Fwd. Assy.
29-21393-1	Doubler Assy. of, Raceway
29-21394-1	Door Assy. of, Ordnance Access
25-31659-7	Rack Installation Accelerometer
25-32416-1	Fitting Assy. of
25-32417-1	Fitting L.H. Support Accelerometer Assy. of
25-32418-1	Fitting R.H. Support Accelerometer Assy. of
25-32751-1	Fitting Main Beam Accelerometer Assy. of
25-32751-2	Fitting Main Beam Accelerometer Assy. of

ENGINEERING DRAWING INDEX

Indenture

MISSILE SECTION 45 (M436)

1 2 3 4 5 6

PART NUMBER	NOMENCLATURE
26-13946-1	Tube-Accelerometer Rack Assy. of
26-13946-2	Tube-Accelerometer Rack Assy. of
29-25287-1	Bracket Support Wire Bundle Assy. of
29-25287-2	Bracket Support Wire Bundle Assy. of
29-24359-1	Tube Fitting Accelerometer Rack, Assy. of
29-24433-1	Channel Support Accelerometer Assy. of
29-24447-1	Support Receptacle Assy. of
29-25217-1	Bracket Wire Support Assy. of
29-25314-1	Clamp Wire Bundle Support Assy. of
29-24447-5	Support Receptacle Assy. of
29-24996-1	Support Receptacle Assy. of
29-25314-2	Clamp Wire Bundle Support Assy. of
25-28538-78	Wire Support & Instrumentation Instl. Insul.
25-35868-2	Strain Gage Instl. Insulated
25-35887-1	Wire Installation Interstage Strain Gage
29-24709-1	Support-Matching Unit Sec. 45 Assy. of
25-28586-12	Calorimeter Assy. of
C1104-B-30-002-070	Calorimeter
10-20477-9120	Thermocouple Assy.
25-37738-1	Ablation Gage Instl.
25-35899-7	Ablation Gage
25-35669-41	Cork Insulation Instl. External
25-18180-10	Equip. Rack Instl.
29-16264-1	Brkt. Assy. of
29-16982-1	Brkt. Assy. of
25-18178-7	Supt. Beam-Assy. of
29-18662-1	Beam Supt.-Assy. of
29-18662-2	Opp. 29-18662-1
29-18692-1	Wire Supt.-Assy. of
25-18141-44	Instrumentation Equipment Installation
21-50035-2	PCM/FM Telemetry Components (Opt.)
21-50037-2	PCM/FM Telemetry Components (Opt.)
21-50038-2	PCM/FM Telemetry Components (Opt.)
21-50039-2	PCM/FM Telemetry Components (Opt.)
21-50040-2	PCM/FM Telemetry Components (Opt.)
21-50041-2	PCM/FM Telemetry Components (Opt.)
21-50042-2	PCM/FM Telemetry Components (Opt.)
21-50036-2	PCM/FM Telemetry Components
21-50036-5	Control Box, Assy. of
10-20402-47	Control Box
110-20402-53	DC to DC Converter Sync.
10-20402-74	12V Voltage Reg. #2
10-20402-84	10MV Amplifier & Clamp Assy.
10-20402-85	50MV Amplifier & Clamp Assy.
10-20402-86	5V Amplifier & Clamp Assy.
21-50036-15	Auxiliary Box, Assy. of
21-50036-8	Auxiliary Box, Sub Assy.
10-20402-48	Auxiliary Box

SECTION III-B

ENGINEERING DRAWING INDEX

Indenture

1 2 3 4 5 6

MISSILE SECTION 45 (M436)

PART NUMBER	NOMENCLATURE
21-50036-16	Auxiliary Box, Assy. of
21-50036-9	Auxiliary Box, Sub. Assy.
10-20402-48	Auxiliary Box
25-34553-7	Matching Unit
29-14180-4	Box, Assy. of
29-26898-1	Clamp, Assy. of
29-26907-1	Clamp Supt. Assy. of
25-34002-1	Module-Ref. Voltage Assy. of
25-34054-1	Module-20V Pwr. Monitor Assy. of
25-34556-1	Module, Calorimeter Cal. I Assy. of
25-34599-1	Module, Calorimeter Cal. II Assy. of
29-25262-1	Ablation Gage Assy. of (Module)
25-25223-5	Bridge Completion Network
25-25223-6	Bridge Completion Network
25-31976-26	Thermocouple Ref. Unit Assy. of (HR 5)
10-20478-11	Thermocouple Junction Box
25-36618-11	Elec. Cable Instl. R&D Sub. Assy.
25-19931-12	Elec. Cable Bundle Aft. Removable Panel
25-19947-58	Elec. Cable Bundle Rcwy. 3rd Stg. Eng.
25-19949-6	Bundle Assy. ECB Instr. Sec. 45 & 47
25-36152-32	Bundle Assy. Sec. 45 Rack
25-36846-29	Marking Instl.
25-19900-242	Patch Plug (P152)
25-19900-243	Patch Plug (P153)
25-19900-244	Patch Plug (P154)
25-19900-249	Patch Plug (P155)
25-19900-246	Patch Plug (P156)
25-19900-253	Patch Plug (P180)

SECTION III-B

ENGINEERING DRAWING INDEX

MISSILE SECTION 47 (M436)

Indenture

1 2 3 4 5 6

PART NUMBER	NOMENCLATURE
21-50122-36	R&D Sub-System Assy. AMR-FTM
25-31011-19	Interstage Assy. Insulated
25-23236-806	Interstage Assy.
29-21546-4	Shield-Explosive Assy.
29-21368-1	Fitting, Panel Tie, Assy. of
29-21368-2	Fitting, Panel Tie, Assy. of
25-26693-1	Fwd. Ordnance Housing, Assy. of
29-20169-1	Door Ordnance Access, Assy. of
29-16843-1	Doubler, Assy. of
29-16843-2	Doubler, Assy. of
29-16843-5	Doubler, Assy. of
29-16844-1	Door-Ordnance Access, Assy. of
29-18853-1	Detonator Housing Aft., Assy. of
29-19410-1	Shield-Explosive, Assy. of
29-19428-6	Doubler-Detonator, Assy. of
25-26051-1	Fitting-Detonator, Assy. of
25-24140-2	Fitting, Assy. of (-15 Opt.)
25-25188-5	Splice Plate, Assy. of
26-13780-1	Bracket Support, Assy. of
25-24140-12	Fitting, Assy. of (-14 Opt.)
29-23773-1	Back-up Angle, Assy. of
26-14020-1	Back-up Angle, Assy. of
29-16843-10	Doubler, Assy. of
26-14189-1	Clip-Retainer-Assy. of
26-14189-3	Clip-Retainer, Assy.of
29-19611-12	Bracket-Lanyard, Assy. of
29-26873-1	Splice Plate Assy. of
25-33890-23	Seat Plate Assy. of
25-26831-6	Tube, Assy. of
29-25787-1	Aft.-Ordnance Housing, Assy. of
29-25788-800	Retainer, Assy. of
25-24139-43	Adaptor Ring Assy. of Upper (-48 Opt.)
29-24427-4	Ring Seal Supt. Assy. of
25-24139-49	Adaptor Ring Assy. of Lower
25-29593-4	Wire Severance Instl. Deadface
25-30160-3	Wire Severance Instl. Deadface
25-28539-50	Wire Supt. & Instr. Instl.
29-25529-1	Cover Instr. Protective Assy. of
10-20477-9120	Thermocouple
25-28586-12	Calorimeter Assy.
C1104-B-30-002-070	Calorimeter
29-21042-1	Support Assy. of
25-37738-1	Ablation Cage Instl.
25-35899-1	Ablation Cage
25-26627-8	Bracket Instl. G&C Support
25-25864-5	Support Bracket, Assy. of
25-25864-11	Support Clamp Assy. of

ENGINEERING DRAWING INDEX

Indentured

MISSILE SECTION 47 (M436

1 2 3 4 5 6

PART NUMBER	NOMENCLATURE
25-25864-29	Bracket Support, Assy. of
29-24426-3	Clamp Brkt. G&C Cable, Assy. of
25-35633-7	Cork Insulation Instl.
25-29156-6	Marking Instl.
25-17233-55	Support Rack Instl. Instr.
26-9271-3	Bracket, Assy. of
26-9272-3	Bracket, Assy. of
26-16435-1	Bracket, Assy. of
29-18599-7	Tray Assy.
25-37013-1	Cork Insul. Instl. External Instg. 1-2
25-18140-44	Instr. Equip. Installation
21-50035-3	PCM/FM Telemetry Components (Opt.)
21-50037-3	PCM/FM Telemetry Components (Opt.)
21-50038-3	PCM/FM Telemetry Components (Opt.)
21-50039-3	PCM/FM Telemetry Components (Opt.)
21-50040-3	PCM/FM Telemetry Components (Opt.)
21-50036-3	PCM/FM Telemetry Components
21-50036-6	Control Box Assy. of
10-20402-47	Control Box
10-20402-53	DC to DC Converter, Sync.
10-20402-74	12V Voltage Regulator #2
21-50036-18	Auxiliary Box Assy. of
21-50036-12	Auxiliary Box Sub-Assy.
10-20402-48	Auxiliary Box
21-50036-17	Auxiliary Box Assy. of
21-50036-11	Auxiliary Box, Sub-Assy.
10-20402-48	Auxiliary Box
25-34554-8	Matching Unit, Modular, Instg. Assy. of
29-25262-1	Module-Ablation Gage Assy. of
29-14192-4	Box Assy. of
25-34002-1	Module-Voltage Ref. Assy. of
25-34054-1	Module-20V Power Mon. Assy. of
25-34556-1	Module Cal. Calib. I, Assy. of
29-26898-1	Clamp Assy. of
29-26907-1	Clamp Supt. Assy. of
10-20459-2	D.C. Amplifier
25-31976-25	Thermocouple Ref. Unit Assy. of
10-20478-11	Thermocouple Junction Box
25-36617-11	Cable Instl.-Elect. R&D Sub-Assy.
25-19949-8	Elect. Cable Instl. Sec. 45 & 47,49
25-34535-27	Wire Instl. R&D Fwd. Adaptor Ring
25-20290-1	Insulation Instl.
25-19935-58	Bundle Assy.
25-20290-1	Insulation Instl.
25-36846-26	Marking Instl.
25-19900-237	Patch Plug P145 Assy. of
25-19900-256	Patch Plug P146 Assy. of

SECTION III-B

ENGINEERING DRAWING INDEX

MISSILE SECTION 47 (M436)

Indenture

1 2 3 4 5 6

PART NUMBER	NOMENCLATURE
25-19900-261	Patch Plug P147 Assy. of
25-19900-240	Patch Plug P148 Assy. of
25-19900-241	Patch Plug P149 Assy. of
29-19900-247	Patch Plug P178 Assy. of
25-36153-32	Elect. Cable Bundle-Instr. Rack Assy. of
25-19946-72	Elect. Cable Bundle-Raceway 2nd Stage Engine, Assy. of
25-36179-4	Insul. Instl. R&D Wiring Stage III
29-27165-1	Clamp-Hook Type Assy. of

SECTION III-B

ENGINEERING DRAWING INDEX

MISSILE SECTION 49 (M436)

Indenture

1 2 3 4 5 6

PART NUMBER	NOMENCLATURE
21-50122-36	R&D Sub-System Assy.
25-33938-91	Skirt Assy.-Insulated
25-29156-5	Marking Instl.
25-35582-12	Wire & Instrumentation Instl.
25-36472-1	Support Instl., Wire Routing
25-23196-7	Calorimeter Assy.
29-28030-1	Bracket Assy.
29-27752-1	Support Assy.
10-20477-9120	Thermocouple
25-37738-2	Ablation Gage Instl.
25-35899-8	Ablation Gage
25-33898-800	Skirt Assy.
25-36616-11	Elec. Cable Instl. R&D Sub-Assy.
25-20290-1	Insulation Installation
25-36846-25	Marking Instl.
25-19928-12	Elect. Cable Bundle, Raceway
25-19945-53	Elect. Cable Bundle, Raceway
25-36180-8	Insulation Instl. R&D Wiring Stage I

SECTION III-B

ENGINEERING DRAWING INDEX

MISSILE SECTION Multi (M436)

Indenture 1 2 3 4 5 6 PART NUMBER	NOMENCLATURE
21-50122-36	R&D Sub-System Assy. AMR-FTM
25-35487	Tech. Sheet Guided Msl. R&D Sub Syst. Assy.
29-22327-3	Switch Timer Premature Separation (CTLI)
10-20987-13	Timer Interval
10-20987-12	Timer Interval

SECTION IV-C

COMMITTED ENGINEERING CHANGES

CHANGE	STATUS	REMARKS	LAST PG.	DDRC STATUS DATED	COMP/INC
CCP					
646	Inc	Comp. for Seattle Resp.	32	12-12-62	Comp.
728-2	Comp.	In Seq. M436	2	6-29-62	Comp.
805	Inc.	Comp. for Seattle Resp.	22	4-8-63	Comp.
836	Inc.	Complete for Seattle Resp.	30	12-5-62	Comp.
886	Comp.		5	3-26-63	Comp.
1049	Comp.		22	6-25-63	Comp.
1128	Comp.		1	4-5-63	Comp.
1158	Comp.		7	7-12-63	Inc.
PER					
4145	Comp.		2	8-2-62	Comp.
4147	Comp.		1	6-19-62	Comp.
4189	Comp.		1	8-9-62	Comp.
4196	Comp.		2	9-7-62	Comp.
4202	Comp.	In Seq. M436	2	8-15-62	Comp.
4232	Comp.		1	10-26-62	Comp.
4247	Comp.		1	11-12-62	Comp.
4254	Comp.		5	11-21-62	Comp.
4258	Comp.		1	11-7-62	Comp.
4259	Inc.	Comp. for Seattle Resp.	1	12-6-62	Comp.
4267	Comp.		1	12-5-62	Comp.
4270	Comp.		6	2-26-63	Comp.
4272	Comp.		1	12-26-62	Comp.
4275	Comp.		6	1-24-63	Comp.
4279	Comp.		3	1-18-63	Comp.

SECTION IV-C

COMMITTED ENGINEERING CHANGES

CHANGE	STATUS	REMARKS	DDRC STATUS LAST PO.	DATED	COMP/INC
FRR					
4280	Comp.		1	1-29-63	Comp.
4290	COMP.		6	4-23-63	Comp.
8557-181	Comp.		1	8-8-62	Comp.
8587-198	Comp.		1	12-7-62	Comp.
8595-233	COMP		1	7-26-63	COMP
80700-186	Comp.		1	9-18-62	Comp.
80700-190	Comp.		1	10-19-62	Comp.
80700-191	Comp.		1	10-19-62	Comp.
80700-193	Comp.		1	11-2-62	Comp.
80700-194	Comp.		1	11-19-62	Comp.
80700-195	Comp.		1	11-19-62	Comp.
80700-196	Comp.	In Seq. 436	1	11-27-62	Comp.
80700-197	Comp.		1	12-17-62	Comp.
80700-199	Comp.		1	12-17-62	Comp.
80700-202	Comp.	In Seq. 436	1	1-3-63	Comp.
80700-210	Comp.		1	2-28-63	Comp.
80701-186	Comp.		1	9-19-62	Comp.
80701-191	Comp.	In Seq. 436	1	10-18-62	Comp.
80701-195	Comp.		1	11-19-62	Comp.
80701-198	Comp.		1	12-17-62	Comp.
80701-199	Comp.		1	12-14-62	Comp.
80701-210	Comp.		1	2-28-63	Comp.
80702-196	Comp.	In Seq. 436	1	11-27-62	Comp.
80702-198	Comp.		1	12-20-62	Comp.

SECTION IV-C

COMMITTED ENGINEERING CHANGES

CHANGE	STATUS	REMARKS	LAST PO.	DDRC STATUS DATED	COMP/INC
80702-199	Comp.		1	12-14-62	Comp.
80702-205	Comp.		1	1-21-63	Comp.
80702-208	Comp.		1	12-15-62	Comp.
80702-210	Comp.		1	2-28-63	Comp.
80703-205	Comp.		1	1-21-63	Comp.
80710-192	Comp.	In Seq. 436	1	10-31-62	Comp.
80811R-1	Comp.		1	7-11-62	Comp.
80953	Comp.		1	10-23-62	Comp.
80956	Comp.		1	11-8-62	Comp.
80957	Comp.		1	11-14-62	Comp.
80961	Comp.		1	12-29-62	Comp.
80968	Comp.		1	1-24-63	Comp.
80969	Comp.		1	2-26-63	Comp.
80970	Comp.		1	2-28-63	Comp.
83504	Comp.		1	8-24-62	Comp.
83518	Comp.		2	9-18-62	Comp.
83546	Inc.	Comp. for Seattle Resp.	1	10-3-62	Comp.
83566	Comp.		1	10-24-62	Comp.
83582	Comp.		1	10-31-62	Comp.
83601S	Comp.		1	12-7-62	Comp.
83674	Inc.	Comp. for Seattle Resp.	1	3-11-63	Comp.
83610-1	Inc.	Comp. for Seattle Resp.	8	3-13-63	Comp.
85009-193	Comp.		1	11-9-62	Comp.
800037R1	Comp.		1	12-6-62	Comp.

SECTION IV-C

COMMITTED ENGINEERING CHANGES

CHANGE	STATUS	REMARKS	DDRC STATUS LAST PG.	DATED	COMP/INC
800037R-2	Comp.		1	12-21-62	Comp.
83732	COMP.		1	6-11-63	Comp.
83755	INC.	COMPLETE FOR SEATTLE RESP.	1	6-6-63	Comp.

7-31-63

Test Engineering
Acknowledgement of
Configuration Status

SECTION VII-A

CONTRACT SPECIFICATION NON-CONFORMANCE ITEMS (OPERATIONAL)

MISSILE SECTION M 436 Multi Section

REPAIR PART NUMBER	JOB NUMBER	SERIAL NUMBER
21-50122-93436 UER U078331	57317	M436

DISCREPANCY:

Reference: D2-7969, Volume 36, Section 7 and UER 078327, Job No. 57317

The following channels were out of tolerance as read out on NIXIE during Channel Verification Run #2

CHANNEL	% F. S. Error	REQUIREMENT
RO 63E	-1.6%	± 1.2%
RO 49X	-1.32%	± 1.2%
RO 50X	-1.60%	± 1.2%

Fix:
See D2-10889-1, Volume 53, Section X, Page 4 for waivers.

21-50122-93436 UER U078230	57318	M436

DISCREPANCY:
Reference: D2-7969, Volume 36, Section 8.
IO 34E reads 41% on stripout and should be 37.5%. Model specification requires ± 3% tolerance.

Fix: See D2-10889-1, Volume 53, Section X, Page 5 for waivers

21-50122-93436 UER U 078277	57318	M436

DISCREPANCY:

Reference D2-7969, Volume 36, Section 8, Run #2 and Computer Run 441 dated 7-24-63.

The following channels were out of tolerance during the running of the above test: 0037E, 0092E, A064T, I006E, R015A

Fix: See D2-10889-1, Volume 53, Section X page 4 for waivers.

21-50122-93436 UER U170203	57317	M436

DISCREPANCY:
The following channels were out of tolerance during channel verification Run #3 reference computer dump test No. 500: 0037E, 0092E, A064T, A007S, R015A

Fix: See D2-10889-1, Vol. 53, Section X, Page 4 for waivers.

SECTION VII-A

CONTRACT SPECIFICATION NON-CONFORMANCE ITEMS (OPERATIONAL)

MISSILE SECTION M 436 Multi Section

NEAR PART NUMBER	JOB NUMBER	SERIAL NUMBER
21-50122-93436 UER U170319 DISCREPANCY:	57320	M436

The following channels were out of tolerance during 45 Section "X" Axis vibration per D2-7969 Volume 36, Section 10. Reference computer dump test No. 450 Run #1: A 007S

FIX: See D2-10889-1, Volume 53, Section X, Page 5 for waivers.

21-50122-93436 UER U078222 DISCREPANCY:	57318	M436

Reference D2-7969, Volume 36, Sections 0 & 8 and UER 078329, J/N 57318

The following channels were out of tolerance during 43 "Y" Axis vibration as read out on oscillograph stripout: - R017A, R018A, R050X.

FIX: See D2-10889-1, Volume 53, Section X, Page 5 for waivers.

21-50122-93436 UER U170295 Page 4 DISCREPANCY:	57319	M436

Ref: D2-7969, Vol. 36, Sec. 9Para. 6.4.8
During 43 "X" Axis the receiver signal strength on PCM oscillograph recording NoX4533 dropped 1.62db. The maximum deviation allowed 15 ± 1.5.db.

FIX: See D2-10899-1, Vol 53, Sec. X, Page 5A For waivers.

21-50122-93436 UER U 164764 Page 5 DISCREPANCY:	57319	M436

Ref:D2-7969 , Vol. 36, Sec 9 Run #2
The following listed channels are out of tolerance per computer run #431 on Data taken per the above ref. doc. during 43 "X" Axis vibration run #2.
GO 37E G092E R015A

FIX: See D2-10889-1, Vol 53, Sec X, Page 5 for waivers

SECTION VII-A

CONTRACT SPECIFICATION NON-CONFORMANCE ITEMS (OPERATIONAL)

MISSILE SECTION M436 Multi Section

NEXT PART NUMBER	JOB NUMBER	SERIAL NUMBER
21-50122-93436 UER U078228 Page 7 DISCREPANCY:	57319	M436

Ref: D2-7969, Vol 36, Sec. 9
Channel I034E output on stripout is 41.0% and voltage measurement gives 37.35% Model spec requires ± 3%.

FIX: See D2-10889-1, Vol 53, Sec. X Page 5 For waiver.

21-50122-93436 UER U078221 Page 8 DISCREPANCY:	57319	M436

Ref: D2-7969, Vol. 36, Sec. 049 and UER U078326 Page 6 J/N 57319.
The following channels were out of tolerance during 43 "X" Axis vibration as read out on oscillograph strip out:
R017A R0 18A R050X

FIX: See D2-10889-1, Vol. 53, Sec X, Page 5 for waivers

21-50122-36 UER U078281 DISCREPANCY:	57310	M436

Due to removal & Replacement of the 25-15850-9 Telemetry Antenna per UER U170193 & U078278 on P/N 21-50122-36(43), S/N 57323. RF Power, per D2-7969 Vol 36 Sec 2 is no longer valid.

FIX: See D2-10889-1 Vol 53 Sec 10 Page 3 for waivers

EQUIPMENT FAILURES

MISSILE SECTION 436 MULTI SEC.

M&IR PART NUMBER	JOB NUMBER	SERIAL NUMBER
21-50122-36 (47) UER U165123 (Page 20)	39450	M436

Discrepancy:

Reference D2-7969, Vol. 36, Section 3, Electrical Wire Diagram 25-15203, Sheet 19 and U048698 J/N 57313. During Run #1 of channel verification, Section 3, D2-7969, Vol. 36, the output of transducer A312T was observed to be approximately 10 percent of noise. Investigation on UER 048698 J/N 57313 states that the circuitry of A312T exhibit no capacitance to a bridge across it. The capacitance of A312T Channel 3 of HR2 S/B 22 Micro-Farads per D10-20478.

Fix

Removed 25-31976-25, S/N M436 and replaced with S/N M441.

21-50122-93436 U147217 (Page 11)	57317	M436

Discrepancy

Reference D2-7969, Vol. 36, Section 7, Run #1. The following listed channels were out of tolerance per the above Reference Run #1 Computor Dump #500: R015A, R019A, R020A, R021A, G037E, G040E, G075E and G092E.

Fix

Removed 21-50035-37 S/N 0009 and replaced with 21-50035-37, S/N0008.

21-50122-93436 UER U170123	57318	M436

Discrepancy

Reference D2-7969, Vol. 36, Paragraph 6.1.1, Run #1. During the upsweep, the downsweep and both Quiescent Data Runs of M436 "Y" axis vibration, the MISTRAM Transponder lost lock-on on the calibrate channel. The range channel lost lock-on during the downsweep and Quiescent Data Runs.

Fix

Removed Transponder Assembly 25-28056-2, S/N M438R and replaced with 25-28056-2, S/N 0002R. (69 / 4)

SECTION VII-B

EQUIPMENT FAILURES

MISSILE SECTION M 436 (Multi Section)

M&IR PART NUMBER	JOB NUMBER	SERIAL NUMBER
21-50122-93436 UER U170296 and U178226	57316	M 436

DISCREPANCY:

Reference: D2-7969, Vol. 36, Section 6, Run #8, paragraph 9.8.13 and on

The following listed phase shift dial readings were observed which results in an "out of tolerance" condition per reference document. 8 M. C. Phase shift should not be more than 4° per paragraph 9.12.

PARAGRAPH REFERENCE	DATA
9.8.13	84° 11'
9.9.19	79° 19'
9.9.25	83° 42'
9.10.4	73° 51'
9.9.26	-6° 37'
9.10.5	67° 14'
9.11.4	79° 04'
9.11.5	73° 03'
9.12	7° 57'

Also, during sub-systems tests, Loss of Lock of phase Lock-on was observed frequently, making it difficult to complete sensitivity tests.

Fix:

Removed Transponder Filter Assembly 25-28056-2, Serial No. 0002R (69 & 4) and replaced with Serial No. 436R (74 and 34).

SECTION VII-B

EQUIPMENT FAILURES

MISSILE SECTION M 436 (Multi Section)

M&IR PART NUMBER	JOB NUMBER	SERIAL NUMBER
21-50122-93436 UER U170293	57316	M 436

REFERENCE: D2-7969, Volume 36, SE 6, Run #9, Para. 8.4.6

DISCREPANCY:
When the sweep switch is "ON" and the run advance switch is depressed to obtain illumination of the 264 MC light, the calibrate channel loses lock. Unable to check sensitivity with automatic sweep on.

UER U078286

REFERENCE: D2-7969, Volume 36, Section 6, Run #9, paragraph 8.5.3 and UER'S 170207 and 170293.

DISCREPANCY:
The Transponder (Serial No. 74) will not exhibit a phase locked condition for a period of 40 ± 10 seconds using manual sweep mode (See U 170293 and U 170294)

FIX: (UER'S U 170293 and U 078286)
Removed Transponder Filter Assembly 25-28056-2, Serial No. M 436R (74 and 34) and installed Serial No. 441R (21 and 30)

SECTION VII

SHORTAGES

SEPARATE SHIPMENT

1. (1) 10-20987-12 and (1) 10-20987-13 Premature Separation Switch Assy. They are shipped direct from Electro Developmental Corp. to BATC.

2. (2) 10-20439-7 Cartridge Assy. and (2) 10-20439-8 Cooling Valve. They are shipped direct from Tailing Corp. to BATC.

3. (1) 25-19501-9 Electrolyte Kit. The parts are shipped direct from Yardney Electric Corp. to BATC.

4. (2) 10-20942-3 C/D Battery Assy. To be shipped direct from Tele-Computing Corp. to BATC.

5. 25-25173-8 Battery Tray and 25-15799-25 C/D Battery 43 Section. BATC O.D. Dates to be determined by Mfg. Engr.

   25-15799-25 is optional to and interchangeable with 25-15799-24.
   25-25173-8 is optional to and interchangeable with 25-25173-7.

SHIP-SHORT ITEMS

None

7-31-63

Test Engineering
Acknowledgement of Configuration Status

ENGINEERING WAIVERS AND DEVIATIONS AND WAIVERS

Date: 7-29-63

Missile Effectivity FTM 436 Event Record No.:

Spec. or Doc. No.: D2-3603-3 Revision: Date: 12-9-61

Spec. or Doc. Title: Model Specification S-133-1007C - Instrumentation Subsystem - Airborne - R&D WS-133A, WS-133A-M

Waiver X Deviation _____

Page No: 135 Paragraph No: 3.5.1

Paragraph Title: Electro-Interference - Equipment

Description:

I. The PCM/FM RF Section did not meet all the specification requirements of GM 07-59-2617A. A waiver is requested for the following areas of non-compliance:

A. Antenna Conducted Spurious Emanations - Transmitted Keydown

PCM/FM TR-10 "D" Frequency

Frequency	db "out of spec"
144.5 mc	11
201.0 mc	35
208.0 mc	25
223.0 mc	24.8
345.5 mc	33.1
460.0 mc	29
1.39 kmc	29
1.62 kmc	35.7
1.85 kmc	29
2.075 kmc	11
2.3 kmc	11
2.53 kmc	16.3

B. Antenna Conducted Spurious Emanations - Transmitter Crossmodulation

FM/FM TR-10 "B" Frequency Mod.

Frequency	db "out of spec"
201.0 mc	25.2
206.0 mc	38
211.0 mc	11.6
223.2 mc	17
225.4 mc	8.6
226.0 mc	28.6
229.0 mc	21.9
235.8 mc	29.7
238.2 mc	31.2
241.0 mc	5.4

FM/FM TR-10 "C" Frequency Mod.

Frequency	db "out of spec"
195.0 mc	29.3
200.4 mc	31.3
218.0 mc	13
220.5 mc	23
223.0 mc	10.2

The TR-10 is the transmitter subcomponent of the PCM/FM RF Section

Reason: 1

Change Status: 6

Sht. 1 of 5

REVISED _____

US 4000 0000

BOEING VOL 53 SEC X NO D2-10889-1 PAGE 1

Description (continued)

II. The 10-20403 FM/FM Telemetry System did not meet all the specification requirements of GM 07-59-2617A A waiver is requested for the following areas of non-compliance:

A. Antenna Conducted Spurious Emanations - Transmitter Keydown

FM/FM TR-10 "B" Frequency		FM/FM TR-10 "C" Frequency	
Frequency	db "out of spec"	Frequency	db "out of spec"
206.0 mc	36.7	216.5 mc	19
214.0 mc	7	218.0 mc	23
227.0 mc	25.5	235.5 mc	18.2
229.5 mc	24	450.0 mc	9.7
245.0 mc	13	676.0 mc	25
710.0 mc	2	1.13 kmc	9
1.420 kmc	13	1.36 kmc	5
1.66 kmc	52	1.57 kmc	37
1.895 kmc	36.7	1.80 kmc	37
2.12 kmc	19.9	2.03 kmc	17
2.35 kmc	20.2	2.25 kmc	29
3.3 kmc	23.8	2.93 kmc	1

B. Antenna Conducted Spurious Emanations - Transmitter Crossmodulation

FM/FM TR-10 "B" Frequency PCM/FM TR-10 "D" Frequency Mod.		FM/FM TR-10 "C" Frequency PCM/FM TR-10 "D" Frequency Mod.	
Frequency	db "out of spec"	Frequency	db "out of spec"
201.0 mc	38	195.5 mc	20
206.0 mc	38	201.0 mc	33.6
210.0 mc	11	217.0 mc	16
223.0 mc	17.2	221.0 mc	31.9
225.0 mc	24.6	223.0 mc	18
226.0 mc	28.6	236.5 mc	35.
229.0 mc	17	680.0 mc	2.6
241.0 mc	2	689.0 mc	1.3

C. Radiated Interference - Narrowband

Frequency	db "out of spec"
1.66 kmc	4.6
1.894 kmc	2.8

Reasons: (2)

III. The 10-20476 Staging Switch did not meet all the specification requirements of GM 07-59-2617A. A waiver is requested for the following areas of non-compliance:

A. Conducted Interference - .15 to 25 MC

Current probe measurements made on the power lines in lieu of line stabilization network measurements.

Description (continued)

B. Conducted Interference - 30 CPS - 150 KC

Current probe measurements in this frequency range indicate only one "out-of-specification" condition. The subject equipment was 5 db above the specification at 32.4 KC with a 20 mf capacitor shunted across the Input Power Leads external to the switch.

Reasons: 3

Change Status: 7

IV. The following "out-of-spec" conditions were noted on the 10-20401-1 Event Markers when subjected to the tests of GM 07-59-2617A: (As defined by D2-6181)

Test	Out-of-Tolerance Conditions Noted	Frequency and Amount Limit Exceeded
A2	Ground Wire (Black)	14 MC - .64 db
	Ground Wire (Green)	16 MC - .7 db
	Ground Wire (Yellow)	14 MC - 1.3 db
	Ground Wire (Red)	4.0 MC - .2 db
	Ground Wire (Red)	5.2 MC - 2.2 db
	Ground Wire (Red)	8.0 MC - .1 db
M1		14 MC - 4.2 db
		15 MC - 10.5 db
		25 MC - 0.8 db

Reason: 4

V. The 10-20428-2 Command Destruct Receiver was not tested to the specification requirements of GM 07-59-2617A. A waiver is requested for the following areas of non-compliance:

A. Conducted Interference - 0.015 to 25 MC. The equipment was tested by employing a threshold measuring technique.

Employing this technique, a number of interference signals were recorded which were between 10 and 20 db above specification. Two interference signals were recorded which were between 20 and 30 db above specification and one was recorded which was between 30 and 40 db above specification.

B. Radiated Interference - .15 - 400 MC. Radiated measurements were also made employing the threshold technique. The data obtained during the test shows that radiated interference was above specification limits. Most interferences were between 10 and 20 db above specifications. Twelve interference signals were between 20 and 30 db above specifications, one between 30 and 40 db and one above 40 db.

Reason: 5

Change status: 8

Sht. 3 of 5

Reasons:

1

1. Antenna Conducted Spurious Emanations - Transmitter Keydown

a. a. All interference conditions except at 201 and 223 mc were suppressed to below GM 07-59-2617A limits by the Triplexer Directional Coupler during Transmitter Cross Modulation tests.

b. Interference signals at 201.0 and 223.0 mc appear as a result of being image frequencies.

2. Antenna Conducted Spurious Emanations - Transmitter Crossmodulation

a. FM/FM "B" Frequency Modulation

(1) 201, 206 and 223 mc spurious signals appear as a result of being image frequencies.

(2) All other spurious signals are within design requirements. (Requirement is for spurious signals to be 60 db below the fundamental.)

b. FM/FM "C" Frequency Modulation

(1) 195, 201 and 223 mc spurious signals appear as a result of being image frequencies.

(2) All other spurious signals are within design requirements.

(3) The above units have operated at missile level in Seattle PET and at AMR without evidence that crossmodulation or antenna conducted spurious emanations have interfered with the operation of other instrumentation systems or reduced the accuracy or reliability of transmitted data.

2

1. Antenna Conducted Spurious Emanations - Transmitter Keydown

a. All interference conditions except at 206.0 and 229.5 mc were suppressed to below GM 07-59-2617A limits by the Triplexer Directional Coupler during Transmitter Crossmodulation tests.

b. Interference Signals at 206.0 and 229.5 mc appear as a result of being image frequencies.

2. Antenna Conducted Spurious Emanations - Transmitter Crossmodulation

a. FM/FM "B" Frequency and PCM/FM "D" Frequency Modulation

(1) 201.0, 206.0 and 223.0 mc spurious signals appear as a result of being image frequencies.

(2) All other spurious signals are within design requirements. (Requirement is for spurious signals to be 60 db below the fundamental.)

Reasons: (continued)

b. FM/FM "C" Frequency and PCM/FM "D" Frequency Modulation

(1) 195.5, 201.0 and 217.0 mc spurious signals, appear as a result of being image frequencies.

(2) All other spurious signals are within design requirements.

(3) The above units have operated missile level in Seattle PET and at AMR without evidence that crossmodulation or antenna conducted spurious emanations have interfered with the operation of other instrumentation systems or reduced the accuracy or reliability of transmitted data.

3 A: When the power lines were measured using the line stabilization network, the unit had one data point "out-of-specification" by 7 db. This occurred at 150 KC. It was determined that the "out-of-specification" condition was caused by the 5 uh choke in the line stabilization network tuning with a 22 uf capacitor in the input of the equipment. Subsequent tests employing the current probe technique, showed that the interference was 21 db below the specification at 150 KC and the specification was not exceeded at any frequency during this test.

B. Boeing vendor for the staging switch estimates that it will cost $15,000 to redesign the equipment. Boeing estimates that it will cost $10,000 to scrap the remaining units of the original configuration if it is replaced.

4 All the above "out-of-specification" conditions in Test A2 and B1 are acceptable considering the accuracy of the measuring instruments except at 14 MC and 15 MC in Test B1. It is felt that this level of radiated interference (approximately 50 uv meter indication) is not sufficient to cause degradation of the system. If any degradation of performance occurs during the MIL-I-6051 test it will be corrected at the systems level.

5 The interference conditions recorded during both the conducted and radiated interference tests were due almost entirely to destruct switching. Since this switching operation destroys the missile, it is felt that interference conditions from this switching operation will not be detrimental.

Change Status:

6 BSD Letter BSQAP-26-6-100/C. Humphrey/3938, dated 26 June 1962 authorized BSD Waiver Number BSQAP-49.

7 Authorized by BSD Letter BSQAP-31-5-97/V. Davis/3948, dated 31 May 1962.

8 BSD/STL was advised of the Cost and Time estimates to meet these requirements by Letter 2-6021-20-26, dated 7-5-62. Authorized by BSD Letter BSQAP-28-6-137/C. Humphrey/3938, dated 28 August 1962.

Date: 7-29-63

Missile Effectivity FTM 436 Event Record No.:

Spec. or Doc. No.: D2-3603-3 Revision: Date: 12-9-61

Spec. or Doc. Title: Model Specification S-133-1007C - Instrumentation Subsystem - Airborne - R&D WS-133A, WS-133A-M

Waiver X Deviation _____

Page No: 239 Paragraph No: 4.4.13.1.1

Description:

Allow performance of the Mistram Sensitivity Test using manual sweep of the calibrate channel in lieu of automatic sweep.

Reason:

TWX BSQA 5-7-21 directed The Boeing Company to perform Subsystem Sensitivity Tests in the manual sweep mode.

Sht. 1 of ___

Date: 7-29-63

Missile Effectivity FBM 456 Event Record No.:

Spec. or Doc. No.: D2-3603-3 Revision: Date: 12-9-61

Spec. or Doc. Title: Model Specification S-133-1007C - Instrumentation Subsystem - Airborne - R&D WS-133A, WS-133A-M

Waiver X Deviation _____

Page No: 150 Paragraph No: 4.4.1.1

Description:

Allow omission of the performance of the "Power Radiated" test.

Reason:

Subsequent to completion of testing a defect was discovered in the teflon thermal insulating sheath on one of the telemetry antennas. The antenna was replaced and a system insertion loss and VSWR test was performed. Radiated power can be derived from previous transmitter power measurements and from the above retest data and is within tolerance. Further retest is not warranted.

Sht. 1 of ___

Date: 7-29-63

Missile Effectivity FTM 436 Event Record No.:

Spec. or Doc. No.: D2-3603-3 Revision: Date: 12-9-61

Spec. or Doc. Title: Model Specification S-133-1007C - Instrumentation Subsystem - Airborne - R&D WS-133A, WS-133A-M

Waiver X Deviation _____

Page No: 157 Paragraph No: 4.4.3.1.9

Paragraph Title: System Accuracy

Description:

Allow an out-of-tolerance condition during subsystem testing for the following measurements:

Measurement Code	Reason	Specification Tolerance % F.S.	Measured Accuracy % F.S.
G037E	Note 1	± 1.1	- 1.3
G092E		± 1.1	- 1.3
A064T		± 1.1	- 1.2
A007S		± 1.7	+ 1.9
R015A		± 1.1	- 1.2
R063E		± 1.2	- 1.6
R049E		± 1.2	- 1.3
R050E	Note 1	± 1.2	- 1.6

Note 1: The accuracy of these channels is not sufficiently out of tolerance to appreciably degrade system performance.

Sht. 1 of ___

Date: 7-29-63

Missile Effectivity FTM 436 Event Record No.:

Spec. or Doc. No.: D2-3603-3 Revision: Date: 12-9-61

Spec. or Doc. Title: Model Specification S-133-1007C - Instrumentation Subsystem - Airborne - R&D WS-133A, WS-133A-M

Waiver X Deviation ____

Page No: 143 Paragraph No: 4.2.5

Paragraph Title: Vibration Test

Description:

I. Allow an out of tolerance condition during Vibration tests for the following measurements:

Measurement Code	Reason	Spec. Tol. % F.S.	Measured Accuracy % F.S. Sec. 43 X Axis	Sec. 43 Y Axis	Sec. 45 X Axis	Sec. 47 X Axis
G037E	Note 1	± 1.1	- 1.6	- 1.6		
G092E		± 1.1	- 1.6	- 1.4		
A064T		± 1.1		- 1.2		
I006E		± 1.0		+ 1.4		
E015A		± 1.1	- 1.2	- 1.2		
E017A	Note 1	± 1.1	+ 1.2	+ 1.2		
E018A	Note 3	± 1.1	- 1.3	- 2.3		
E050X	Note 3	± 1.2	- 2.3	- 1.8		
I034E	Note 2	± 1.0	+ 3.6	+ 4.1		
A007S	Note 1	± 1.7			+ 1.8	

Note 1: The accuracy of these channels is not sufficiently out of tolerance to appreciably degrade system performance.

Note 2: Measurement I034E is the Mistram calibrate channel AGC telemetry output. The voltage obtained is a function of the input signal level. The signal level is set to -78 dbm to make the initial voltage reading and then subsequently set up again to -78 dbm immediately prior to performance of the vibration test. The input signal level can only be set up to an accuracy of ± 3 dbm thus causing a difference in the measured input voltage and the actual input voltage to the telemetry system. This condition will not result in an appreciable degradation of flight data.

Note 3: The exhibited offset is due to excessive source capacitance in the Test Support Equipment (I.S.S.). This condition is in no way indicative of airborne instrumentation malfunction.

Sht. 1 of 2

II. Allow performance of the Mistram portion of the vibration tests in a manual sweep mode.

Reason: TWX BSQA 11-6-33 directed The Boeing Company to operate in the manual sweep mode during vibration tests.

III. Allow an out-of-tolerance condition for PCM RF received signal strength during the 43X axis vibration test.

Reason: During the 43X axis vibration test, the PCM/FM and the FM/FM received signal strengths exhibited a momentary drop in level. The PCM/FM level change exceeded the specification tolerance, however, the FM/FM level change did not. Investigation of the cause of the problem revealed a broken shield on the coaxial cable connection to the ground receiving equipment. The cable was repaired and no further anomalies occurred during subsequent testing.